IN THE CLAIMS

Please add the following new claims 6-24.

6. The method of claim 1, wherein step (c) comprises detecting shape complementarity between the functional group of the compound and the cavity.

7. The method of claim 1, wherein step (d) comprises detecting a compound that inhibits intermolecular interactions between said target protein and said modifier.

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8. The method of claim 1, wherein step (d) comprises detecting a compound that enhances intermolecular interactions between said target protein and said modifier.

9. The method of claim 1, wherein the target protein is selected from the group consisting of a membrane-bound protein, a cytosolic protein, a nuclear protein, an enzyme, a cytokine, a lymphokine, a chemokine, an adhesion molecule, a growth factor, and a receptor thereof.

10. The method of claim 9, wherein the target protein is a receptor.

11. The method of claim 9, wherein the receptor is a member of the TNF receptor superfamily.

12. The method of claim 11, wherein the TNF receptor superfamily member is selected from the group consisting of the TNF receptor, fas, CD40, gp120, fas ligand, TNF-α, ß-lactamase, c-erbB2, growth hormone receptor, growth hormone, insulin receptor, insulin, IL-1 receptor, IL-1, IL-2 receptor, IL-2, epidermal growth factor receptor (EGFR), and epidermal growth factor.

13. The method of claim 12, wherein the TNF receptor superfamily member is a TNF receptor.

14. The method of claim 9, wherein the target protein is an enzyme.

15. The method of claim 14, wherein the enzyme is ß-lactamase.

16. The method of claim 9, wherein the target protein is a member of the immunoglobulin superfamily.

17. The method of claim 16, wherein the target protein is CD4.

18. The method of claim 1 wherein the modifier is a protein, a non-proteinaceous molecule, or a non-organic molecule.

19. The method of claim 18, wherein the modifier is a protein selected from the group consisting of a membrane-bound protein, a cytosolic protein, a nuclear protein, an enzyme substrate, a cytokine, a lymphokine, a chemokine, an adhesion molecule, a growth factor, or a receptor thereof.

20. The method of claim 18, wherein the modifier is a member of the TNF receptor superfamily.

21. The method of claim 18, wherein the modifier is selected from the group consisting of TNF receptor, fas, CD40, gp120, fas ligand, TNF-α, ß-lactam, c-erbB2, growth hormone receptor, growth hormone, insulin receptor, insulin, IL-1 receptor, IL-1, IL-2 receptor, IL-2, epidermal growth factor receptor (EGFR), MHC/antigen/TCR complex, and epidermal growth factor.

22. The method of claim 21, wherein the modifier is TNF-α.

23. The method of claim 19, wherein the modifier is ß-lactam.

24. The method of claim 19, wherein the modifier is the MHC/antigen/TCR complex.